

§ 98.25-5

and certificated under this subchapter and subchapter D of this chapter.

[CGD 74-289, 44 FR 26008, May 3, 1979]

§ 98.25-5 How anhydrous ammonia may be carried.

(a) Anhydrous ammonia shall be carried in unfired pressure vessel type tanks independent of the structure as detailed in this part, except as otherwise provided in paragraph (b) of this section.

(b) When anhydrous ammonia is to be transported at its boiling temperature at or near atmospheric pressure, the Commandant may permit the use of alternate methods of storage if it is shown to his satisfaction that a degree of safety is obtained consistent with the minimum requirements of this subpart.

§ 98.25-10 Design and construction of cargo tanks.

(a) The cargo tanks shall meet the requirements for Class I, I-L, II, or II-L welded pressure vessels and shall be fabricated, inspected, and tested in accordance with the applicable requirements of part 54 of subchapter F (Marine Engineering) of this chapter.

(b) Unlagged cargo tanks subject to atmospheric temperatures shall be designed for a pressure of not less than 250 pounds per square inch gage.

(c) Where unrefrigerated cargo tanks are lagged as required by §§ 98.25-30 and 98.25-60, the tanks shall be designed for a pressure of not less than 215 pounds per square inch gage.

(d) Refrigerated cargo tanks, in which the temperature of the liquid ammonia is maintained below the normal atmospheric temperatures, shall be designed for a pressure of not less than the vapor pressure corresponding to the temperature of the liquid at which the system is to be maintained, plus 25 pounds per square inch gage.

(e) Each tank shall be provided with not less than a 15" x 18" diameter manhole, fitted with a cover located above the maximum liquid level and as close as possible to the top of the tank. Where access trunks are fitted to

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tanks, the diameter of the trunks shall be not less than 30 inches.

[CGFR 65-50, 30 FR 17022, Dec. 30, 1965, as amended by CGFR 68-82, 33 FR 18902, Dec. 18, 1968]

§ 98.25-15 Markings.

(a) Cargo tanks shall be marked in accordance with the requirements of § 54.10-20 of subchapter F (Marine Engineering) of this chapter.

(b) In addition to the markings required to be stamped on the tank, the legend, "Anhydrous Ammonia" shall be conspicuously and legibly marked upon the dome or upper portion of the tank in letters at least 4 inches high.

(c) All tank inlet and outlet connections, except safety relief valves, liquid level gaging devices and pressure gages shall be labeled to designate whether they terminate in the vapor or liquid space. Labels of noncorrosive material may be attached to valves.

(d) All tank markings shall be permanently and legibly stamped in a readily visible position. If the tanks are lagged, the markings attached to the tank proper shall be duplicated on a corrosion resistant plate secured to the outside jacket of the lagging.

[CGFR 65-50, 30 FR 17022, Dec. 30, 1965, as amended by CGFR 68-82, 33 FR 18902, Dec. 18, 1968]

§ 98.25-20 Installation of cargo tanks.

(a) Independent tanks shall be arranged in the vessel so as to provide a minimum clearance of not less than 24 inches from the vessel's side and not less than 15 inches from the vessel's bottom. Where more than one tank is installed in a vessel, the distance between such tanks shall be not less than 15 inches, unless otherwise approved by the Commandant. Alternate provisions may be made for moving such tanks to provide for adequate inspection and maintenance of the vessel's structure and the tanks.

(b) The design shall show the manner in which the tanks are to be installed, supported, and secured in the vessel and shall be approved prior to installation. Tanks shall be supported in steel saddles and securely anchored in place. If the tanks are required to be stress-relieved no appendages shall be welded to the tanks after they have been